

Appl. No.: 10/053,292
Amdt. Dated: ____ February 2004
Reply to Office Action mailed 08/15/2003

Remarks/Arguments

In the Office Action mailed 08/15/2003, for which a three-month extension of time to answer is requested, the Examiner has objected to the abstract of the disclosure because there should not be bold, italic print therein, and has suggested guidelines for the arrangement of the specification. The Examiner has also objected to the disclosure because of the following informalities: the pages of the specification are not numbered; under the Brief Descriptions of the Drawing section, the individually numbered elements of the figures are improperly listed and described, not the descriptions of the figures themselves as required; there is no detailed description of the invention as required.

In response the specification has been amended to correct for the above informalities with the amended abstract on a separate page. In Figs. 1 & 2 designations 1A, 1B, 1C, 1D, 1E, 2A and 2B have been removed and appropriate reference numerals added to Figs. 1-4.

The Examiner has objected to the claims in the case, that is claim 1-3, because of the following informalities: claims 1 and 2 do not end in a period, and claims 2 and 3 do not have capitalized beginnings. The Examiner has rejected claims 2 and 3 under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-3 have been amended to correct for the informalities and is now believed to be free of the rejection under §112.

The Examiner has rejected claims 1 and 2 under 35 USC §102(b) as being unpatentable over Schroeder (US Patent 3,091,790), the Examiner stating that Schroeder discloses an extension pole with tube 32 with larger and smaller diameter parts as claimed and with a locking mechanism 38 of locking spring push button construction positioned in the smaller diameter part.

Schroeder specifically does not teach or suggest the claimed pole configured for sequential connection of multiple poles wherein the male portion is enlarged to receive the female portion that has a constant diameter throughout. Neither does Schroeder teach or suggest a protective insert, much less one that does not have to be removed for connection to subsequent identical

extension poles. Schroeder merely teaches a simple extension pole having a different telescopic connective means and a truncated end.

With respect to “anticipation” under 35 USC §102, the courts have held that “Anticipation requires the presence in a single prior art disclosure of all of a claimed invention arranged as in the claim.” See Structural Rubber Products Co. v. Park Rubber Co. (Fed Cir 1984) 223 USPQ 124, and Radio Steel & Mfg. Co. v. MTD Products Inc. (Fed Cir 1984) 221 USPQ 757. It is thus submitted that applicant’s amended and new claims are free of rejection under 35 USC § 102 is not applicable.

The Examiner has further rejected claims 1-3 under 35 USC §103(a) as unpatentable over Schroeder, in view of Balint (US Patent 4,225,157) and further in view of UK Patent Application GB 2278190 A. In making the rejection the Examiner repeats the Schroeder §102(b) reason for rejection alleging that Schroeder teaches the claimed invention except for the rubber insert at the end of the tube, cites Balint for teaching a cap 32 for providing a protective service at the end of the tube, and alternatively cites GB ‘190 for teaching of an end cap G with a compression fit.


There is absolutely no teaching or suggestion in Balint of applicant’s claimed invention and the addition of the cap 32 of Balint to the extension pole of Schroeder would still not result in applicant's claimed invention. There would still be no means of connecting additional identical poles to the arrangement. Similarly, the addition of the insert end cap G of the GB ‘190 patent to the extension pole of Schroeder with would still not result in applicant's claimed invention. It would seem that what would result is the Schroeder pole with a capped insert. In any event, there would still be no means of connecting additional identical poles to the arrangement.

As to rejection of claims under 35 USC §103, it has been held that the mere fact that the prior art may be modified in a manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification In re Gordon, 723 F.2d at 902, 221 USPQ at 1127. Accordingly, it is submitted that there is no suggestion, much less a teaching, in the references of record, or the combination thereof that they could somehow be modified or combined as suggested by the Examiner to result in applicant’s disclosed and claimed invention. Thus, in view of the amendments to claims 1-3 it is submitted that the Examiner’s burden has not been met. Further the added new claims 4-8 are likewise submitted as free of the §103 rejection.

Further, it was variously held in Ex parte Warhol, 94 USPQ 193 and in In re Irmischer, 120 USPQ 196, that; references may be combined to anticipate a claim, but their teachings must be capable of suggesting to one skilled in the art, without exercising inventive faculties, their combination in a manner disclosed in the claimed structure; and the claim will be allowed where one skilled in the art, with the prior art before him, but in the absence of applicant's disclosure, would be incapable of constructing the claimed structure without displaying creative genius.

It is abundantly clear that there is no nexus between Schroeder, Balint and the GB '190 patent such that without applicant's disclosure one skilled in the art would be incapable of constructing the claimed structure without displaying creative genius. It is therefore submitted that in view of the above, continued rejections under §102 and §103 would require "patch work" as well as "hind-sight" rejections. It is thus respectfully requested that the Examiner's rejections be reconsidered and the claims in the case, that is amended claims 1-3 and new claims 4-8 be allowed and the case passed to issue.

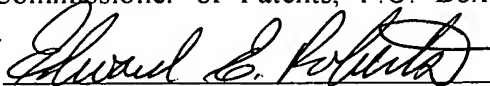
A substitute specification is contained in this response for clarification, correction of informalities, and to better point up applicant's invention. It is submitted that no new matter has been added. A marked up copy of the original specification is attached, revised drawings are enclosed, a completed Form PTO 2038 for the required fee of \$475.00 for a three-month extension of time to reply and an acknowledgment of receipt postcard is enclosed. Inasmuch as the application is now believed in condition for allowance, it is respectfully requested that claims now in the case, that is claims 1-8, be allowed and the case passed to issue. If a telephone call will help with this response, please call the undersigned attorney as indicated below.

 02/15/04
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Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service, postage prepaid, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on 15 February 2004.


Edward E. Roberts
Reg. No. 26,024

Appendix A
Marked Up Copy of the Amendments to The Specification

**TELESCOPING EXTENSION POLE WITH
BUILT-IN TUBE END PROTECTION**

~~CONNECTION FOR TELESCOPING EXTENSION POLES~~

~~Abstract~~

~~An extension pole assembly whereby individual tubes, separate and exactly the same as one another, may be joined to achieve desired length, and a locking push button connects each together as each tube end is inserted into the inside of each additional tube beginning, to form an inner and outer tube connection. The locking push button is positioned into the end of the first pole and as each additional pole is added, the added pole slips into the first pole, the second pole forming the outer tube, the first pole forming the inner tube, the push button retains the newly connected tube into a locked position. The end of each pole contains a rubber protective insert. As each additional tube extension is added, the rubber insert is always at the end of the tube. The rubber insert provides a protective end so as not to mar or damage surroundings in work area.~~

~~CLAIM~~

~~What is claimed is:~~

- ~~1. An extension pole comprising:
a tube having a larger external diameter beginning;
said larger external beginning having an opening in an exterior surface thereof;~~
- ~~2. the same tube having a smaller external end;
said smaller external diameter end having an opening in an exterior surface to position a locking mechanism;
a locking mechanism comprised of;
a locking spring push button projecting from the said opening in the exterior surface;~~

~~3. the said smaller external diameter end having a rubber insert;
the said rubber insert is held in place by compression;
the said rubber insert protrudes beyond the end of the pole.~~

Description

BACKGROUND OF THE INVENTION

2. Field of the Invention

The present invention relates to telescoping extension poles for reaching difficult areas with a tool such as a paint roller, ~~which are separate and exactly the same as each other,, and, more particularly, as each extension pole is added a protective end is always present. The invention is particularly suitable for use when working indoors or in environments where surroundings can be damaged by the blunt end of an extension pole. The rubber end minimizes such damage.~~

~~Additionally, the rubber end prevents debris from entering and deformation to the end of the pole so that future extensions are possible without conflict.~~

~~The present invention provides a means to reach inaccessible areas in the use of various hand tools that are conveniently available on the market. One such tool frequently necessitating extension is the common paint roller. The following US Patent sites the necessity for extension of paint rollers;~~

~~It is therefore desirable to provide an extension pole for a paint roller, so that normally inaccessible areas can be painted without the use of a ladder. U.S. Patent Nos. 3,380,097, Pharris; 4,461,057, Unger; and 4,524,484, Graham pertain to such poles.~~

2. Description of the Related Art

Extension poles are well known in the art. In a typical device, a tube is joined to another tube by inserting the beginning of one tube into the end of the joined tube, the tubes locked ~~locking~~ into position by a push button device. Locking extension poles are useful, for example, ~~for extending~~ to reach normally inaccessible desired locations ~~lengths or heights~~ with a desired tool, such as a paint roller. The method for a typical pole with locking characteristics to be joined with ~~join~~ an additional pole ~~pole~~, includes insertion of

a tube with a reduced beginning so that it may be inserted into the normal sized engaging pole end, the end. The connection is held similarly by a push button or similar device. Examples of prior art extension poles are disclosed in U.S. Patent Nos. 3,380,097 to Pharris, 4,461,057 to Unger, and 4,524,484 to Graham.

However, prior art extension devices are unsatisfactory in that they are comparatively inefficient, time consuming and damage prone in that they are limited in providing this particular connection eliminates the ability to provide a protective end to curtail damage to surrounding obstacles in the given work environment. Thus, for example, furniture can be is also damaged by the blunt end of the conventional pole when the user moves the pole to perform required work. In this particular design, one The user might place a buffer such as a rubber end into the end of the first pole, but as each additional pole is added, the rubber end must be removed from the first pole end and placed into the end of the second pole. If a third pole is needed for additional length, the rubber end must be removed from the second pole end and placed into the end of the third pole. All the while Further, the rubber end may be misplaced and if discovery of misplacement is not recognized, the chance of damage to surrounding furnishings is enhanced. In addition, the time taken to remove and replace the protective end with each extension can be unproductive, exhausting, wasting time and exerting undue energy.

BRIEF SUMMARY OF THE INVENTION

The present invention is directed to a new and improved comprises an extension pole assembly for a tool such as a paint roller or the like utilizing a locking push button to join additional like poles, each pole having a protective end insert extending from one end and not requiring replacement with addition of another extension pole. The first pole extension includes means at one end for attachment to a tool such as a paint roller. The second and any successive extension pole is configured to be telescopically attached to the previous pole. More particularly Each pole is identical and has a the invention comprises an extension pole assembly comprised of an larger diameter beginning end and a smaller diameter trailing end, wherein the smaller end of a leading or first tube can be inserted into the larger diameter beginning of an additional tube, the smaller diameter end of the first or leading tube thus being forming the inner tube of the connection with the larger diameter end of and each additional tube being forming the outside tube of the said

connection. Each pole connection is locked ~~looks~~ into position by a push button, ~~with~~ each smaller diameter end ~~of a pole~~ having a rubber protective insert.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view ~~illustrating one embodiment of~~ the extension pole assembly according to the present ~~invention; invention:~~

~~Fig. 1A is a view of the larger external diameter tube beginning.~~

~~Fig. 1B is a view of the opening which receives the locking push button mechanism.~~

~~Fig. 1C is a view of the smaller external diameter tube beginning.~~

~~Fig. 1D is a view of the locking spring push button projecting from the said opening.~~

~~Fig. 1E is a view of the protective rubber insert.~~

Fig. 2 is a cross section view of the extension pole of Fig. 1 taken along line 2-2 of Fig. 1;
~~Fig. 1~~

~~Fig. 2A shows the locking push button mechanism in place.~~

~~Fig. 2B shows the protective rubber insert in place and protruding beyond the end of the pole to buffer end of would be blunt pole.~~

ADDITIONAL EMBODIMENT

Fig. 3 is a perspective view of an alternate embodiment of the extension pole in accordance with the invention wherein means is used ~~shows a threaded connection for the connection of specialized tools or apparatus; and apparatus.~~

Fig. 4 ~~shows~~ is a cross section view of the alternate embodiment of Fig. 3 taken along line 4-4 of Fig. 3.

~~It will be understood that other modifications into the form of the invention described herein and its preferred embodiments may be made without departing from the spirit thereof and of the scope of the claims which follow.~~

DESCRIPTION OF THE INVENTION

Referring to the drawings where like reference numerals refer to like elements in the several views, there is shown the extension pole, generally designated 10, according to the present invention. Fig. 1 illustrates the pole 10 including a first tubular portion 20 and a second longer elongated tubular portion 30, portion 30 having the same outside diameter throughout its length. Tubular portion 20 has an open end 20a with an internal

diameter larger than the outside diameter of the end of tubular portion 30, open end 20a configured for matingly accepting the end of another pole configured as end portion 30. Thus, multiple extension poles 10 may be sequentially connected one to the other. Aperture 21 is located in tubular portion 20 proximate open end 20a. It is configured for receiving push button means such as push button 32 of tubular portion 30 as more clearly shown in Fig. 2.

Fig. 2 further illustrates tubular portion 30 including aperture 31 proximate the open end 30a thereof through which push button 32 is forced through aperture 31 by spring 33, push button 32 mounted to spring 33 and spring 33 mounted within tubular portion 30. Open end 30a is closed with a protective insert 34, of rubber or other suitable material, that protrudes beyond the open end 30a to provide a buffer to open end 30a. Insert 34 is pressure inserted or otherwise suitably mounted within the open end 30a, and so as not to impede further pole connection has a diameter not to exceed the exterior diameter of end portion 30. This enables sequential connection of multiple extension poles 10 without removal of the insert 34. In the preferred embodiment the insert 34 is of rubber or the like and is pressure, or compressively, inserted into the end of the portion 30. Thus, the insert 34 is likewise replaceable, that is, it can be compressed and removed.

For the attachment of a first extension pole 10 to a tool having an end portion such as that of portion 30, the end portion 20 of extension pole 10 would be fitted over the end portion of the tool. That is, the male tube end of each tube 10 is inserted into the enlarged female end of each additional tube to form an inner and outer tube connection. Extension pole 10 would then be locked into place with the tool by depressing pushbutton 32 until it could be forced through an aperture corresponding to aperture 31 by spring 33. Insert 34 would terminate the connection to provide end protection to portion 30 as well as limit damage to the operating vicinity.

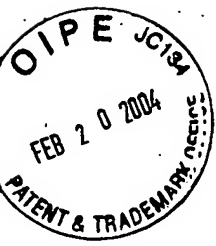
In configuration, pole 10 is formed of hollow cylindrical tubing, portion 30 having an outside diameter of approximately one and 3/8 inches. Portion 20 has an inside diameter slightly greater than the outside diameter of portion 30, or about one and 7/8 inches so as to freely accept portion 30. Portion 20 is attached to portion 30 by welding or other suitable means, or it may be initially formed as an integral unit with portion 30. The total length of pole 10 is in the range of 3 1/2 feet. Portion 20 must be of sufficient length to

provide satisfactory strength and stability when connected as disclosed above, a length of five and 7/8 inches having been found to be adequate. Push button 32 is located about two and 1/2 inches from the end of portion 30 and aperture 21 is located about two and 1/2 inches from the end of portion 20.

Fig. 3 illustrates an alternate embodiment, generally designated 40, in accordance with the invention wherein, as indicated by the like reference numerals, tubular portion 30 is identical to the tubular portion 30 of Fig. 1. The difference is that the portion 20 of Fig. 1 has been replaced with a threaded connection 41 pressure inserted or otherwise suitably mounted into the tubular end 30a opposite the insert 34 for threaded connection to the handle of a paint roller or other desired tool. This embodiment can be used as discussed above in attachment of a first extension pole 10 to a tool having an end portion such as that of portion 30. For instance the threaded connection 41 can be matingly connected to the handle of a paint roller. Fig. 4 is a cross section view of the embodiment of Fig. 3 taken along line 4-4 thereof, and further illustrating the manner in which spring 33, push button 32, insert 34 and threaded insert 41 are mounted within pole portion 30.

While there has been shown and described a preferred embodiment, it is to be understood that various other adaptations and modifications may be made within the spirit and scope of the invention.

What is claimed is:



1/2

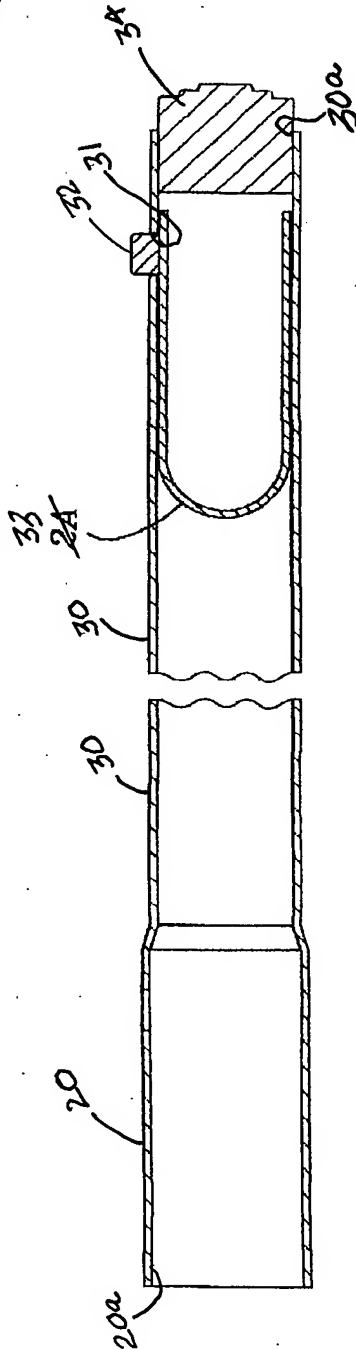


Fig. 2

1A-1E AND 2A REPLACED
WITH NEW REFERENCE
NUMERALS

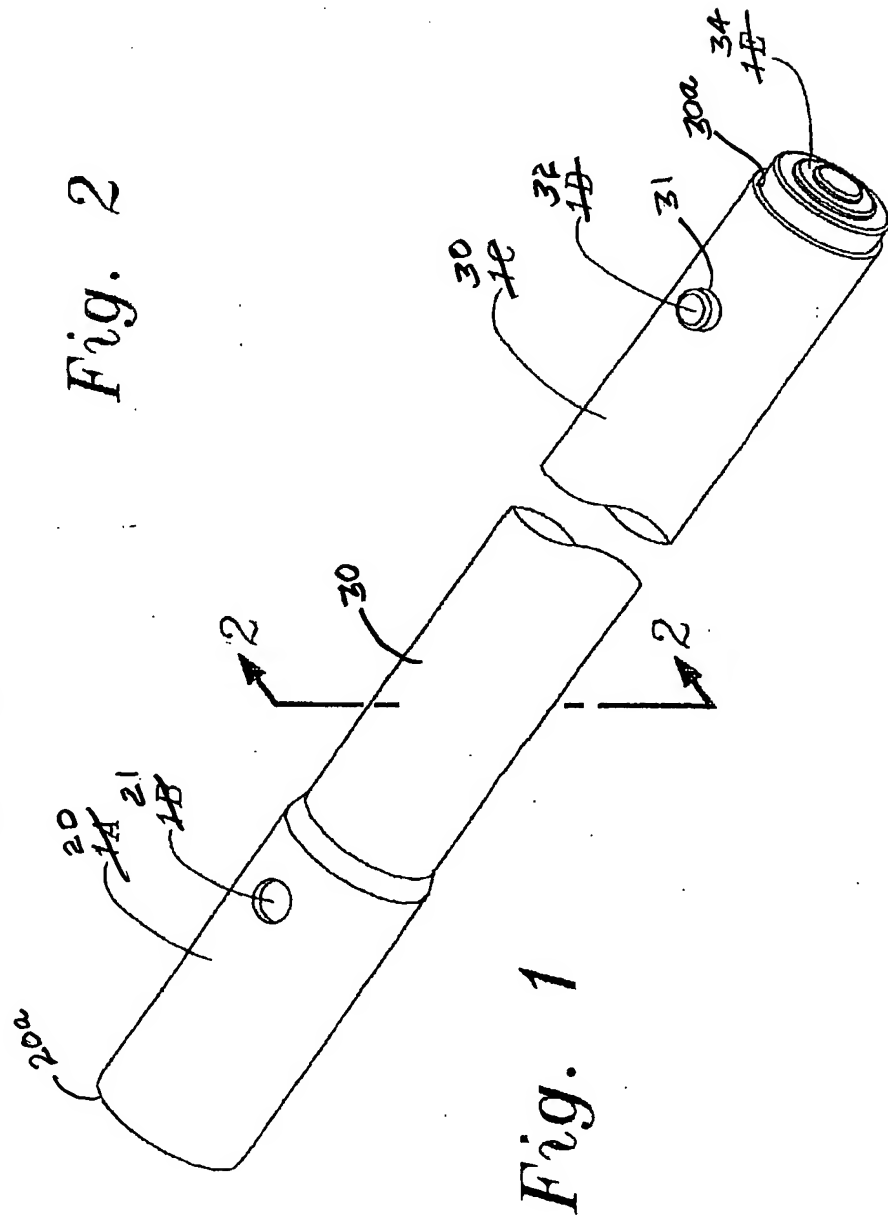


Fig. 1



2/2

ALL REFERENCE
 NUMERALS ADDED

